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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,673	03/25/2004	Kohichi Kamijoh	JP920030033US1	7821
7590 01/08/2008 Diana L. Roberts International Business Machines Intellectual Property Law 11400 Burnet Road Austin, TX 78758			EXAMINER LU, TOM Y	
			ART UNIT 2624	PAPER NUMBER
			MAIL DATE 01/08/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/809,673	Applicant(s) KAMIJOH ET AL.	
	Examiner Tom Y. Lu	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>03/25/2004</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

1. Claims 15-19 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 15-19 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claims 15-19 define a program product embodying functional descriptive material. However, the claim does not define a computer-readable medium or memory and is thus non-statutory for that reason (i.e., "When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized" – Guidelines Annex IV). That is, the scope of the presently claimed a program product can range from paper on which the program is written, to a program simply contemplated and memorized by a person. The examiner suggests amending the claim to embody the program on "computer-readable medium" or equivalent in order to make the claim statutory. Any amendment to the claim should be commensurate with its corresponding disclosure.

Information Disclosure Statement

2. The information disclosure statement filed 03/25/2004 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that

portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered. The non-patent literature article of "Point Sukaishiki Saishin MPEG Kyokasho" by Hiroshi Fujiwara et al was not provided.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Girod et al ("Girod" hereinafter) (U.S. Patent No. 5,809,139).

- a. As per claim 1, Girod discloses a motion picture data processing device (column 3, lines 47-48), comprising: inputting means for inputting motion picture data that has been subjected to compression including frequency transformation and quantization (column 2, lines 8-12; column 3, lines 55-58); watermark embedding means (summing node 38) for generating and embedding a pattern of a visible watermark (column 1, line 27 and specification page 1, 2nd paragraph of BACKGROUND ART) corresponding to a motion compensated prediction in said motion picture data input by said inputting means (column 5, lines 49-67 and column 6, lines 1-53); and outputting means for outputting motion picture data with a watermark embedded therein by said watermark embedding (column 10, lines 8-11).

- b. As per claim 2, Girod discloses wherein said watermark embedding means comprises: intra-block processing means for embedding said digital watermark pattern into blocks that have pixel values relevant to all pixels as information among screens constituting said motion picture data (column 6, lines 27-35; the examiner interprets "screen" as image DCT coefficients); and motion correction means for embedding a cancellation pattern for canceling the movement of said digital watermark pattern due to motion vectors into a screen that is generated through motion compensated prediction based on motion vectors among screens constituting said motion picture data (column 7, lines 36-67 and column 8, lines 1-25).
- c. As per claim 3, Girod discloses wherein said motion correction means generates an image of said cancellation pattern, subjects it to frequency transformation, and embeds it in a screen being processed (column 8, lines 4-25).
- d. As per claim 4, Girod discloses wherein said motion correction means prepares in advance pattern tables for possible cancellation patterns that have been frequency-converted, and selects and embeds an appropriate pattern table in a screen being processed (column 6, lines 27-53, the examiner notes the watermark data is selected in advance).
- e. As per claim 5, Girod discloses a motion picture data processing device (column 3, line 47-48), comprising: dequantization means for dequantizing motion picture data that has been subjected to compression including DCT and quantization (column 2, lines 8-12; column 3, lines 55-58); watermark embedding means for

embedding a pattern of a watermark converted into a DCT coefficient in said motion picture data dequantized by said dequantization means (column 5, lines 49-67 and column 6, lines 1-53); and quantization means for quantizing motion picture data with a watermark embedded therein by said watermark embedding means (column 6, lines 50-53).

- f. As per claim 6, Girod discloses wherein said watermark embedding means comprises: intra-block processing means for converting the image of said digital watermark pattern to DCT coefficients and embedding them into screens that have pixels values relevant to all pixels as information among screens constituting said motion picture data (column 6, lines 27-35); and motion correction means for embedding said digital watermark pattern for which the effect of motion vectors are cancelled into a screen that is generated through motion compensated prediction based on motion vectors among screens constituting said motion picture data (column 7, lines 36-67 and column 8, lines 1-25).
- g. As per claim 7, Girod discloses wherein said motion correction means generates an image of said digital watermark pattern based on said motion vectors, converts it into DCT coefficients, and embeds them into a screen being processed (column 6, lines 27-45).
- h. As per claim 8, Girod discloses wherein said motion correction means prepares in advance pattern tables that show DCT coefficients produced by converting images of possible said digital watermark patterns, and selects and embeds an appropriate pattern table into a screen being processed (column 6, lines 27-53).

- i. As per claim 9, Girod discloses a motion picture data processing device (column 3, line 47-48), comprising: input means for inputting motion picture data that has been subjected to compression including DCT and quantization (column 2, lines 8-12; column 3, lines 55-58); watermark embedding means for embedding a pattern of a watermark converted into a DCT coefficient and then quantized in said motion picture data input by said input means (column 5, lines 49-67 and column 6, lines 1-53); and outputting means for outputting motion picture data with a watermark embedded by said watermark embedding means (column 10, lines 8-11).
- j. As per claim 10, Girod discloses wherein said watermark embedding means comprises: intra-block processing means for converting an image of said digital watermark pattern into DCT coefficients and quantizing them before embedding them in screens that have pixel values relevant to all pixels as information among screen constituting said motion picture data (column 6, lines 27-35); and motion correction means for embedding said digital watermark pattern for which the effect of motion vectors is cancelled into a screen that is generated through motion compensated prediction based on motion vectors among screens constituting said motion picture data (column 7, lines 36-67 and column 8, lines 1-25).
- k. As per claim 11, see explanation in claim 1.
- l. As per claim 12, see explanation in claims 2 and 3.
- m. As per claim 13, see explanation in claims 3 and 4.

- n. As per claim 14, see explanation in claim 5, and column 5, lines 4-21
- o. As per claim 15, Girod discloses the apparatus includes a computer system that inherently contains a computer program stored on a compute readable medium.
Also see explanation in claim 1.
- p. As per claim 16, see explanation in claim 2.
- q. As per claim 17, see explanation in claim 3.
- r. As per claim 18, see explanation in claim 3 and 4.
- s. As per claim 19, see explanation in claim 14.

Conclusion

4. **Examiner note:** Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teaching for the art and are applied to the specific limitations within the individual claim, other passages and figures may be applied as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potential teaching all or part of the claimed invention, as well as the context of the a passage as taught by the prior art or disclosed by the examiner.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Chung et al, U.S. Patent No. 6,310,962 B1, see figure 6.
- b. Miyahara et al, U.S. Patent No. 6,341,350 B1, see figure 1.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom Y. Lu whose telephone number is (571) 272-7393. The examiner can normally be reached on 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on (571)-272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tom Y. Lu/
Art Unit 2624